E/CONF.39/D/179
12 Nov.1962
ORIGINAL : ENGLISH

UNITED NATIONS CONFERENCE
ON THE APPLICATION OF SCIENCE AND TECHNOLOGY
FOR THE BENEFIT OF THE LESS DEVELOPED AREAS

Agenda Item: D.3.3

Sudan

SPECIFICATIONS AND STANDARDS

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SPECIFICATIONS AND STANDARDS

by

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Broadly speaking industrialization in the Sudan made a serious start only in 1956, after the Independence, when the Government enacted the Approved Enterprises(Concessions) Act, the object of which was to give facilities to industrial and similar undertakings so as to speed the rate of industrialization of the country and attract investment of both local and foreign capital. Thanks to this policy more than 200 projects have so far been classified as Approved Enterprises, and a fair number of these has already been established and has started to supply the local market with various types of goods. These can be classified into the following categories :

a) Building materials:

1- Cement
2- RedBricks.
3- Household and sanitary earthenware
4- Gypsum and whiting
5- Floor tiles
6- Asbestos cement sheets and pipes

b) Chemical Industries:

1- Pharmaceuticals
2- Paints, polishes and varnishes.
3- Toilet and cosmetic preparations
4- Laundry and Toilet soap
5- Laundry blue
6- Detergents
7- Perfumeries.
8- Matches
9- Batteries.

c) Cigarettes and Tobacco:

d) Food Stuffs:

1- Flour milling
2- Macaroni and Vermacelli

3- Canned foods.

4- Alcohols and alcoholic liquors

5- Beer

6- Confectionery

7- Biscuits.

c) Electrical Appliances:

1- Water coolers

2- Air conditioners and desert coolers

3- Refrigerators

f) Household Utensils:

1- Aluminiumware

2- Glassware

3- Plasticware

4- Enamelware

g) Metal Works:

1- Wire nails

2- Office and household steel furniture

h) Edible Oils:

1- Extraction and refining of (sesame, groundnuts, castor and cotton seed oils)

2- Hydrogenated fats and oils for :

a) edible purposes

b) industrial purposes

i) Tanning of Leather:

j) Footwear:

1- Rubber

2- Canvas

3- Plastic

4- Leather

k) Textile:

1- Cotton spinning and weaving

2- Knitwear

3- Mantles

l) Paper and Paperboard:

1- Packing materials

2- Cardboard

3- Hardboard.

Most of these industries at present depend on a high proportion of imported raw materials. The general pattern of industrial development, so far, has been for potential industrialists to rely on foreign plant manufactures to provide efficient and suitable machinery, together with a limited number of technicians (usually machine operators) to start the plant and train local workers so as to take over. The customers, usually businessmen, have little or no technical skill or managerial training, rarely employ consultants and thus depend on the reputation of the suppliers. After the establishment of the industry, the aim of the management is to build up the purely functional side of their business. Suitable technicians are not available in the Sudan at present and foreigners are too costly. Under these circumstances, inspite of the reliefs and concessions provided by the Approved (Concessions) Act, many of the local products are often not of the same quality ~~of the same quality of~~ as the imported articles. Consequently every now and then the Ministry of Commerce, Industry & Supply is faced with problems of quality control which made it feel the need for setting up a national body for the introduction of standards, on which the quality of local products can be ascertained and checked. This is, no doubt, of vital importance to the healthy growth and development of our young industry as it would enable us to secure that articles of good quality are offered to the consumer, and at the same time enable us to aim at achieving better products.

At present local manufacturers submit sample of goods to welcome Chemical Laboratories (the Government Analyst) for testing at their own expense, and obtain a certificate of

quality. The following table shows the number of samples received by the laboratories in different categories during last year :-

Waters and sewages	319
Foods	388
Drugs and Pharmaceuticals	48
Clinical specimens	30
" "	48
Toxicological specimens	183
Forensic specimens	13
Edible oils, seeds and oil cakes	925
Damaged materials	186
Building	4
Disinfectant	2
Essences	6
Gums	15
Inks	3
Insecticides	34
Methylated spirits	4
Minerals	23
Oxygen cylinders	3
Paint and polishes	6
Plastic materials	2
Soaps	35
Tobacco	2
Other samples	17
	2248

A quotation from the Government Analyst's report reads :-

"In view of the increasing volume of sub-standard articles of food and drinks exposed for sale in the market there is a tendency for amending the existing law to enable the Minister of Health to issue food

standard regulations. That is because at the moment Public Health, Police and Ministry of Commerce, Industry and Supply Authorities are reluctant, in the absence of standards, to take any legal measures to curb the sale of sub-standard foods. Many brands of tomato puree, sherry, winigar, squashes, tea, flour, milk powders, processed cheese are much below the normal quality standards accepted in other countries and even in their countries of ~~other countries and~~ origin. This is a part from the inadequate packing and mis-leading labelling and publicity. It is hoped that such amendment to the law, and the progressive introduction of food standards and regulations will offer adequate protection to the public and regulate, direct and supervise the conditions of preparation and sale of food in the country".

However all Government orders are now obtained through tenders which are open for both local and foreign manufacturers on the basis of definite specifications (in most cases these are British specifications and standards: and some-times with little modifications to suit local conditions); and in these orders an offer submitted by a local manufacturer is not given any preference unless it is of reasonable quality and price.

The object of the Government is to encourage the establishment, locally of industries which would produce high quality products, and thus ultimately cut down imports. Under its existing terms of reference, The Industrial Advisory Committee which considers applications for new industries in the Sudan - has no direct responsibility for quality. In most cases classification is given before the firm goes into production, and any promises in respect of quality have to be taken on trust. Applicants are asked in the questionnaire as to which specification they intend to conform, but no machinery exists to check their subsequent production, and there are no legal means of enforcement.

However it is not in the country's interest to encourage the manufacture of inferior quality. Hence it has been decided that a certain body should be set up at this stage of development to introduce standards to control quality in manufacture, as a factor of prime importance for maintenance of a good standard of living and for success in competitive trading.

Recently Professor C.A. Geneva, Divisional Chief Technical Officer of the British Standards Institution visited the Sudan at the request of the Sudanese Ministry of Commerce, Industry and Supply. During his seven days stay in Khartoum he visited a number of factories in various stages of development. He also visited :

1) A vocational training centre where workers for the plumbing industry and for light diesel engine repairs and maintenance are being instructed.
2) The Khartoum Technical Institute.
3) The Faculty of Engineering of Khartoum University
4) The Faculty of Agriculture and its Research Centre.

On the light of these visits, together with the discussions he made with the Authorities of the Ministry of Commerce, Industry and Supply, Professor Geneva prepared a report on standardization in Sudanese Industry. The following recommendations are quoted from that report :-

1) "Appoint a small panel of experts partly for their technical qualifications and partly for their sound knowledge of the conditions under which imported goods and materials are used. Climatic conditions are important. Variations in temperature, humidity, wind, dust storms etc at all seasons as they very much effect corrosion, wear and tear, and durability.

2) This panel, which would later develop into the Official Sudanese Institution for Standaridization - S.I.S. - should, as a first step, obtain the official standards applying to certain imported products, and should study, at home and through short missions to the factories of the countries of origin, the possibilities of improvement or simplification to suit local requirements and conditions, tentative specification should be kept under constant review during their application;

3) Arrangements should be made where necessary to test imported or locally made articles for compliance with the specified standards.

4) It is important to realize that standardization procedure is not the same in all industrial countries. In the Republic of the Sudan, the pattern to lows is undoubtedly that of a central office responsible for <u>all</u> standardization.

5) During the transitional period, about one year, there should be no attempt at compulsion for adoption of the preliminary standards, except in certain fields likely to affect safety or health, or to involve bodily risks when this can be imposed by law or Ministrial Orders.

6) When standardization panel becomes stabilized in its functions, application should be made for employment as a member body of the International Organization for standardization - the ISO. Experience acquired in the working of ISO technical Committees is of the greatest value in prepering National Standards as standardization expends.

7) A well stocked library of national standards, covering at least the industries, existing or planned, should be established for the use of the standardization office.

Conclusion:

The Government of the Republic of the Sudan, being aware of the effectiveness of standardization as a means of increasing productivity and reducing unit production cost while at the same time maintaining and advancing level of quality, has already included the establishment of this institution in the next ~~seven~~ ten years Development Budget. A series of studies are now being made to set up an Industrial Research Institute, the task of which will be to carry out research work and tests in the fields of national science and technology for development of Sudanese Industry and agriculture; this Institute shall have various Department such as :-

a) Department of testing materials.
b) Chemistry Laboratory.
c) Department of Economics and Management Science
d) Central Workshop, etc ...

The Standard Institution would either be a part of the Industrial Research Institute or as a separate institution.

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